

# A Conversation with C. R. Rao

Morris H. DeGroot

Calyampudi Radhakrishna Rao was born on September 10, 1920, in Hadagali, Karnataka State, India. He received an M.A. in mathematics from Andhra University in 1940; an M.A. in statistics from Calcutta University in 1943; a Ph.D. from Cambridge University in 1948, with a thesis entitled "Statistical problems of biological classification"; and an Sc.D. from Cambridge in 1965 on the basis of his published work in statistics as a whole. He joined the Indian Statistical Institute as a statistician in 1944 and became a professor in 1949, the director of the Research and Training School in 1964, the secretary and director of the Institute in 1972, and the Jawaharlal Nehru Professor in 1976. In 1979 he was appointed a University Professor in the Department of Mathematics and Statistics at the University of Pittsburgh. He has been the President of the International Statistical Institute, the Institute of Mathematical Statistics, the International Biometric Society, and the Indian Econometric Society; and since 1964, an editor of *Sankhyā*. He is a Fellow of the Royal Society (FRS) of the United Kingdom; a Foreign Honorary Member of the American Academy of Arts and Science; an Honorary Member of the International Statistical Institute; an Honorary Fellow of the Royal Statistical Society; an Honorary Life Member of the Biometric Society; a Fellow of the Indian National Science Academy and Indian Academy of Sciences; an Honorary Fellow of King's College, Cambridge; and a Founder Fellow of the Third World Academy of Sciences, Trieste. He has received honorary degrees from Andhra University, India, 1967; Leningrad University, U.S.S.R., 1970; Delhi University, India, 1973; Athens University, Greece, 1976; Osmania University, India, 1977; Ohio State University, U.S.A., 1979; Universidad Nacional de San Marcos, Peru, 1982; University of the Philippines, 1983; and University of Tampere, Finland, 1985.

The following conversation took place in his office at the University of Pittsburgh one morning in November 1985.

## "THERE WERE NOT MANY OPPORTUNITIES FOR THOSE WITH A DEGREE IN MATHEMATICS TO GET A JOB"

**DeGroot:** To start at the beginning, tell me a little about your childhood in India, what your home life was like, and how you came to get interested in statistics.

**Rao:** Well, I come from a family of a kind of landed aristocracy. They had a lot of property and never cared to go and study and try to make a living on the knowledge that they acquired in their studies. However, at one stage they were interested in the legal profession and they all became lawyers and judges and so on.

**DeGroot:** Who do you mean by "all"?

**Rao:** My ancestors, my relations. I was, so to say, the first one to get interested in science. I started off with mathematics, but then the war broke out when I

was just finishing my master's degree in mathematics and there were not many opportunities for those with a degree in mathematics to get a job. So I tried to get a job in the military service. I applied to the Department of Survey, which is sort of a party to any military expedition. I was disqualified because I was too young and they didn't want me, but that took me to a place called Calcutta. I belonged to the South but I had gone to Calcutta for the interview to get into the military service. At that time I came to know of the Indian Statistical Institute which had been established by Mahalanobis, so I just casually visited the place and talked to people there. They said that statistics was a new subject and if there are no opportunities for a job with a mathematics background, why not come and study statistics.

So I applied for a course of studies at the Indian Statistical Institute and I was admitted. At that time there were no courses in statistics in the universities.